

bi-layers extending from each vesicle core to periphery, and  
being separated by an interstitial liquid, wherein said  
vesicles contain at least one agent for avoiding the  
degradation of said active agent.

2. (Amended) [A] The composition according to claim 1,  
[characterized in that] wherein the interstitial liquid is  
water and [in that] the active agent is included in the  
[membranes] bi-layers of said vesicles when [it] the active  
agent is hydrophobic or in the interstitial liquid when [it]  
the active agent is hydrophilic.

3. (Amended) [A] The composition according to claim 1,  
[or 2, characterized in that] wherein said vesicles are of  
dimensions [lying] in the range 0.1  $\mu\text{m}$  to 50  $\mu\text{m}$ [, and  
preferably in the range 0.2  $\mu\text{m}$  to 10  $\mu\text{m}$ ].

4. (Amended) [A] The composition according to [any one of  
claims 1 to 3, characterized in that the membranes] claim 1,  
wherein said bi-layers of said vesicles comprise a mixture of  
[two surfactants respectively referred to as] a lipophilic  
surfactant, having a hydrophilic-lipophilic balance (HLB) in  
the range 3 to 7, and a hydrophilic surfactant, having an HLB  
in the range 8 to 15.

5. (Amended) [A] The composition according to [any one of  
claims 1 to 4, characterized in that the membranes] claim 1,  
wherein said bi-layers of the vesicles contain at least one

polymer surfactant or/a polymer having amphiphilic properties.

6. (Amended) [A] The composition according to [any one of claims 1 to 5, characterized in that] claim 1, wherein said active agent is selected from the group [constituted by] consisting of reducing molecules, oxidizing molecules, and molecules sensitive to hydrolysis[, in particular vitamins, enzymes, and proteins].

7. (Amended) [A] The composition according to [any one of claims 1 to 6, characterized in that] claim 1, wherein said active agent is a substance sensitive to oxidation and said agent [whose] for avoiding degradation [is to be avoided] is a substance [known for its anti-oxidizing properties because of its] having reducing properties, [or because of its action for reducing the risk of oxidation by] having a trapping effect[, e.g. by an effect of trapping traces of oxidation-catalyzing metal ions contained in the medium,] or [by acting] which acts on [the] pH [of the medium] when the redox potential depends on pH.

8. (Amended) [A] The composition according to claim 7, [characterized in that] wherein said vesicles contain, as the active agent, vitamin C or a derivative thereof, together with at least one agent for reducing oxidation thereof.

9. (Amended) [A] The composition according to [any one of claims 1 to 6, characterized in that] claim 1, wherein the [as

its] active agent [it contains] is at least one enzyme whose degradation is to be avoided, together with a stabilizing agent for avoiding said degradation.

10. (Amended) [A] The composition according to claim 9, [characterized in that] wherein said agent for avoiding degradation of said enzyme is a known stabilizing agent for stabilizing proteins[, preferably an agent acting on the conformation of the enzyme, in particular an ion, e.g. a calcium ion, or an agent carrying functions suitable for bonding with said enzyme].

11. (Amended) [A] The composition according to claim 9, [or 10, characterized in that] wherein said agent for stabilizing said enzyme is selected from the group consisting of surfactants and amphiphilic molecules [containing] comprising the following [functions or substituted by the following groups] moities:

- quaternary ammoniums;
- amines and ethanolamine;
- molecules carrying a phosphate function[, in particular phospholipids];
- salts and esters of fatty acids;
- salts of polyacids;
- alcohols;
- glycerol and esters thereof [(glycerides)];

• polyols, [such as polyglycerides,] polyethyleneglycol, polypropyleneglycol; and

• sugars [such as sorbitol, glucose, lactose, saccharose].

12. (Amended) [A] The composition according to claim 9 [or 10, characterized in that] wherein said agent for stabilizing said enzyme is a polymer, selected from the group [constituted by] consisting of :

• optionally modified polysaccharides [such as agarose, guar gums, carrageenans, alginic acid and alginates, pectin, chitosan];

• optionally substituted polyvinylpyrrolidones;

• cellulose and cellulose derivatives [such as alkylated or functionalized derivatives];

• polyacrylates;

• polyvinylalcohol [(PVA)] and partially hydrolyzed derivatives of polyvinylacetates;

• polyacrylamides; and

• polyamides.

13. (Amended) [A] The composition according [to any one of claims 9 to 12, characterized in that] claim 9, wherein said agent for avoiding degradation of said enzyme is a compound having at least one nitrogen-containing function[, in particular a surfactant or a polymer].

14. (Amended) [A] The composition according to [any one of claims 1 to 13, characterized in that] claim 1, wherein said agent for avoiding degradation of said active agent has an amphiphilic nature, [confering to it] and plays an active role in the formulation of the bilayers of said vesicles.

15. (Amended) [A] The composition according to [any one of claims 1 to 14, characterized in that] claim 1, wherein said agent for stabilizing said active agent [constitutes] comprises a second active agent.

16. (Amended) [A] The composition according to [any one of claims 1 to 15, characterized in that] claim 1, wherein said vesicles [furthermore] further comprise at least one leakproofing agent [for reinforcing their leakproofing], said leakproofing agent being encapsulated within said vesicles or [constituting] comprising an external coating [of] on said vesicles.

17. (Amended) A method of preparing a composition according to [any one of claims 1 to 16, the method being characterized in that it comprises] claim 1, comprising the steps of:

· preparing a liquid crystal lamellar phase comprising at least one surfactant and incorporating at least one active agent and an agent for avoiding degradation of said active agent; and

transforming said liquid crystal phase into said multilamellar vesicles of [onion-structure] by shear or by applying mechanical force thereto.

18. (Amended) [A] The method according to claim 17, [characterized in that] wherein said shear is homogeneous shear.

19. (Amended) A method of improving the stability of an active substance and of avoiding degradation thereof, [the method being characterized in that it consists in] comprising encapsulating said active substance within multilamellar vesicles as defined in [any one of claims 1 to 16] claim 1, [or as obtained by the method of claims 17 or 18, having an onion-structure and constituted, from the periphery to the center, by membranes in the form of concentric bi-layers comprising at least one surfactant, said membranes being separated by an interstitial liquid] said vesicles incorporating within them at least one agent for avoiding degradation of said active agent.

20. (Amended) A method of protecting [and/or] or immobilizing an enzyme, [the method being characterized in that it consists in] comprising placing [putting] said enzyme in the presence of multilamellar vesicles [of onion-structure] in the form of a regular stack of concentric bi-layers comprising at least one surfactant, said bi-layers extending

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from each said vesicle core to periphery, and being separated  
by an interstitial liquid, said vesicles incorporating [within  
them] therein at least one agent for avoiding degradation of  
said enzyme as defined in [any one of claims 10 to 13 or in  
encapsulating said enzyme within multilamellar vesicles as  
defined in any one of claims 9 to 13, or as obtained by the  
method of claim 17 or 18, said vesicles incorporating within  
them at least one agent for avoiding degradation of said  
enzyme as defined in any one of claims 10 to 13].

Please add the following new claim:

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--21. A method of protecting or immobilizing an enzyme,  
comprising placing said enzyme in the presence of  
multilamellar vesicles in the form of a regular stack of  
concentric bi-layers comprising at least one surfactant, said  
bi-layers extending from each said vesicle core to periphery,  
and being separated by an interstitial liquid, said vesicles  
incorporating therein at least one agent for avoiding  
degradation of said enzyme by encapsulating said enzyme within  
multilamellar vesicles as defined in claim 9.--